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January 19, 2010

Ms. Wendy Phillips  
California Regional Water Quality Control Board (CARWQCB)  
Los Angeles Region  
320 West 4th Street, Suite 200  
Los Angeles, CA 90013

Dear Ms. Phillips:

Re: December 17, 2009 Tentative Order for Issuance of  
Waste Discharge Requirements Prohibiting Discharge  
Malibu La Paz, 3700 La Paz Lane, Malibu, CA  
File No. 08-101

In response to the Los Angeles Regional Water Quality Control Board (LARWQCB) December 17, 2009 Tentative Order for Issuance of Waste Discharge Requirements Prohibiting Discharge at Malibu La Paz, 3700 La Paz Lane, Malibu, CA 90265 (File No. 08-0101), on behalf of the Owner, La Paz Ranch, LLC, Lombardo Associates, Inc. (LAI) submits the following comments that demonstrate that the proposed project will achieve an effluent quality and groundwater impact that is in compliance with TMDL requirements for nitrogen, phosphorus and bacteria. The LaPaz wastewater systems is far superior than the recently LARWQCB permitted comparable advanced wastewater treatment and disposal systems in the Malibu Lagoon watershed. The LaPaz system will beneficially reuse all wastewater and its nutrients. There will be no nuisance conditions resulting from the project and any statements to that point have no basis in facts.

As illustrated on the attached Table entitled Malibu Civic Center - Malibu Creek Lagoon Wastewater Discharge Permits - Comparables Analysis, the LaPaz wastewater system will have, essentially no discharge of nitrogen and phosphorus as the landscape irrigation nutrient fertilizer demand is greater than the amount contained within the raw wastewater and the site's landscape irrigation demand is far greater than the amount of wastewater produced after in-building recycling. Consequently all wastewater and its nutrients will be beneficially reused. These are major positive environmental aspects of the project and consistent with CA State Water Reuse Policies.

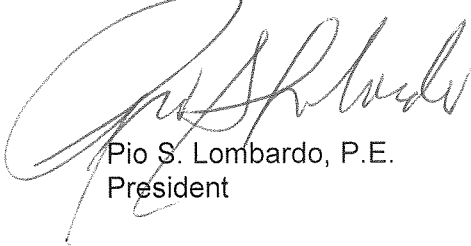
LaPaz's only discharge would consist of wastewater salts and emergency discharges when the treated effluent does not achieve reuse standards and there is no capacity to treat the "off-specification for reuse effluent". LaPaz has proposed to be a responsible participant in any LARWQCB plan resulting from the State Water Resources Control Board's requirement that salt management programs be prepared for watersheds. It is noted that a Malibu Civic Center wastewater treatment system engineered by LaPaz's Engineer of Record, using a much simpler version of the proposed LaPaz technology, has been consistently achieving Title 22 effluent

requirements. Consequently, the frequency of emergency discharges is anticipated to be very low in part due to the great history and as well as the extensive redundancy that is part of the LaPaz Wastewater System. Depth from the discharge to groundwater for the emergency discharges will be 5 – 30+ feet with the majority of the site emergency discharge occurring in areas with depth to groundwater being 10+ feet. Transient groundwater modeling of emergency effluent discharge indicates that there would be no discernible impact on the wastewater systems of other properties.

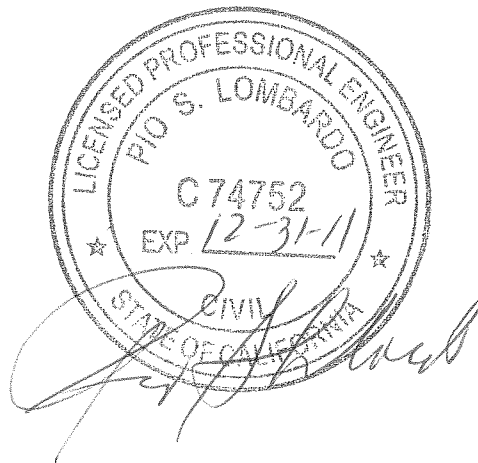
As illustrated on the attached Table entitled Malibu Civic Center - Malibu Creek Lagoon - Water Quality - TMDL Compliance Analysis, the LaPaz wastewater system will be in compliance with TMDL requirements. With essentially no net groundwater discharge of nutrients associated with landscape irrigation and essentially no bacteria as required for Title 22 standards, the LaPaz project is in compliance with TMDL requirements and the LaPaz project would not impair any other site from complying with TMDL requirements.

If you have any questions or comments on this matter, please do not hesitate to contact me by telephone (617) 964-2924 or E-mail [Pio@LombardoAssociates.com](mailto:Pio@LombardoAssociates.com).

Yours truly,



Pio S. Lombardo, P.E.  
President



**Malibu Civic Center - Malibu Creek Lagoon Wastewater Discharge Permits - Comparables Analysis**

Location		Malibu Creek Plaza Effluent Standards				Lumber Yard Effluent Standards				CA DPH Title 22 Unrestricted Reuse Requirements <sup>(3)</sup>		LaPaz Plan						
LARWQCB Order #		01-010		2001		R4-2008-0211		2008				Reuse Effluent Quality <sup>(4)</sup>		Discharged Effluent Quality <sup>(6)</sup>				
Constituent	Units	Average	Max	Max Mass	% of TMDL	Average	Max	Max Mass	% of TMDL	Average	Max	Average	Max	Average	Max	Max Mass	% of TMDL	
Flow	(gpd)		42,000	lb/day			17,000	lb/day					37,120 <sup>(9)</sup>	0.0	0.0	lb/day		
BOD <sub>5</sub>	mg/l	30.0	45.0	Design Flow Max 16,000		30.0						10.0	30.0	No Discharge <sup>(10)</sup>	No Discharge <sup>(10)</sup>			
Total Suspended Solids (TSS)	mg/l	30.0	45.0									10.0	30.0					
Turbidity	NTU	10.0	15.0			2.0	10.0			2.0	10.0	2.0	10.0					
Oil & Grease	mg/l	-	15.0			10.0	15.0						15.0					
TDS	mg/l	-	2,000			-	2,000						2,000					
Sulfate	mg/l	-	500			500							500					
Chloride	mg/l	-	500			500							500					
Boron	mg/l					2						2						
Total Phosphorus	mg/l					2		0.21	4%			See note (5)					0	0%
Total Nitrogen	mg/l	-	10.00	3.50	58%	1 or 3 <sup>(8)</sup>		0.14	2%			See note (5)					0	0%
Fecal Coliform <sup>(1)</sup>	MPN/ 100 ml	-	200															
Enterococcus <sup>(2)</sup>	MPN/ 100 ml	24.00	104.00														0	0%
Total Coliform	MPN/ 100 ml					1.1 <sup>(8)</sup>	230			2	23	2	23					

(1) The limits for coliform shall apply, prior to discharge of the effluent into the leach fields.

(2) The enterococcus limit is geometric mean of at least 5 equally spaced samples in any 30-day period.

(3) Standards as defined by CADPH for Title 22 Disinfected Tertiary Recycled Water

(4) Prior to Reuse for In-Building Non-Potable and Landscape Irrigation

(5) Total Nitrogen & Phosphorus effluent quality will be dictated by landscape fertilizer requirements. Landscape demand for N & P is greater than raw wastewater so therefore all nutrients will be beneficially reused.

(6) Discharged to Groundwater during normal operations

(7) 7-day maximum

(8) 1 applies if leachfield is constructed without soil addition and between 5 and 10 feet is maintained between bottom of leachfield and highest historical groundwater. No discharge allowed if GW < 5 feet.

(9) Code Flows as required by LARWQCB. LaPaz is of the opinion that design flow should be 28,000 gpd.

(10) It is proposed that effluent not meeting effluent requirements would be discharged on temporary emergency basis. Turbidity or Total coliforms are only expected causes - both of which are removed by drainfield soils. In LaPaz's opinion based upon comparables and the ability to retreat "off-spec" effluent, few if any emergency discharges are envisioned.

**Malibu Civic Center - Malibu Creek Lagoon - Water Quality - TMDL Compliance Analysis**

Location		TMDL Discharge Requirements		US EPA Lagoon Water Quality Criteria		Malibu Creek Plaza Effluent Standards				Lumber Yard Effluent Standards				LaPaz Plan							
TMDL <sup>(1)</sup> Parameter		Nov 16 - April 14	April 15 - Nov 15			01-010		Max Mass	% of TMDL	R4-2008-0211		Max Mass	% of TMDL	Reuse Effluent Quality <sup>(4)</sup>		Discharged Effluent Quality <sup>(6)</sup>					
Constituent	Units					Average	Max	lb/day		Average	Max	lb/day		Average	Max	Average	Max	Max Mass	% of TMDL		
Flow	(gpd)						42,000	Design Flow Max 16,000			17,000				37,120 <sup>(2)</sup>	0.0	0.0	lb/day			
Total Nitrogen	mg/l	8.0	93% reduction of septic loading <sup>(7)</sup> total of 6 lbs/day	1.0		-	10.0	3.50	58%	1 or 3		0.14	2%	See note (5)		No Discharge	No Discharge	0.0	0%		
Total Phosphorus	mg/l		90% reduction of septic loading <sup>(7)</sup> total of .9 lbs/day	0.10						2		0.21	4%	See note (5)				0.0	0%		
		Geometric mean	Single sample	Geometric mean	Single sample																
Fecal Coliform <sup>(1)</sup>	MPN/ 100 ml	200	400	200	400	-	200														
E. coli	MPN/ 100 ml			126	235																
Enterococcus <sup>(2)</sup>	MPN/ 100 ml	35	104	35	104	24.00	104.00														
Total Coliform	MPN/ 100 ml	1,000	10,000 or 1,000 if FC/TC>0.1	1,000	10,000 or 1,000 if FC/TC>0.1					1.10	230			2	23						

(1) Total Maximum Daily Loads (TMDL)

(2) Code Flows as required by LARWOCB.

(3) It is proposed that effluent not meeting effluent requirements would be discharged on temporary emergency basis. Turbidity or Total coliforms are only expected causes - both of which are removed by drainfield soils. In LaPaz's opinion based upon comparables and the ability to retreat "off-spec" effluent, few if any emergency discharges are envisioned.

(4) Prior to Reuse for In-Building Non-Potable and Landscape Irrigation

(5) Total Nitrogen & Phosphorus effluent quality will be dictated by landscape fertilizer requirements. Landscape demand for N & P is greater than raw wastewater so therefore all nutrients will be beneficially reused. Any nutrients removed in the treatment process will need to be added for landscape fertilization requirements.

(6) Discharged to Groundwater during normal operations

(7) Septic loading is typically 60 mg/l TN and 8 - 12 mg/l TP. EPA TMDL assumes 50% soil TN removal and 90% TP removal. 93% TN removal results in effluent quality of 4.2 or 2.1 mg/l. 90% TP reduction results in TP effluent quality of .1 mg/l